AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4. (Cancelled).

Claim 5. (Currently Amended) A communication system comprising a transmission apparatus for transmitting a signal at plural types of transmission rates, and a reception apparatus for receiving the transmitted signal, wherein:

the transmission apparatus comprises:

signal generation means for generating a signal to be transmitted into which pilot symbols which are predetermined patterns have been inserted, such that a ratio [[that]] of a number of the pilot symbols ~~appear in~~ to a total number of symbols in a single slot of the signal becomes a value responsive to a transmission rate of the signal; and

transmission means for transmitting the generated signal, and

the reception apparatus comprises:

reception means for receiving the transmitted signal; and

coherent detection means for carrying out coherent detection by using the pilot symbols included in the received signal.

Claim 6. (Currently Amended) The communication system as claimed in claim 5, wherein the signal generation means generates the signal to be transmitted into which the pilot

symbols have been inserted, such that the ratio [[that]] of the number of the pilot symbols ~~appear in~~ to the total number of symbols in the single slot of the signal becomes a substantially optimum value in consideration of both accuracy of coherent detection by using the pilot symbols and transmission efficiency of the signal.

Claim 7. (Currently Amended) A transmission apparatus for transmitting a signal at plural types of transmission rates, comprising:

signal generation means for generating a signal to be transmitted into which pilot symbols which are predetermined patterns have been inserted, such that a ratio [[that]] of a number of the pilot symbols ~~appear in~~ to a total number of symbols in a single slot of the signal becomes a value responsive to a transmission rate of the signal; and

transmission means for transmitting the generated signal.

Claim 8. (Currently Amended) The transmission apparatus as claimed in claim 7, wherein the signal generation means generates the signal to be transmitted into which the pilot symbols have been inserted, such that the ratio [[that]] of the number of the pilot symbols ~~appear in~~ to the total number of symbols in the single slot of the signal becomes a substantially optimum value in consideration of both accuracy of coherent detection by using the pilot symbols and transmission efficiency of the signal.

Claim 9. (Currently Amended) A transmission method for transmitting a signal at plural types of transmission rates, comprising:

a signal generation step of generating a signal to be transmitted into which pilot symbols which are predetermined patterns have been inserted, such that a ratio [[that]] of a number of the pilot symbols ~~appear in~~ to a total number of symbols in a single slot of the signal becomes a value responsive to a transmission rate of the signal; and

a transmission step of transmitting the generated signal.

Claim 10. (Currently Amended) The transmission method as claimed in claim 9, wherein the signal generation step generates the signal to be transmitted into which the pilot symbols have been inserted, such that the ratio [[that]] of the number of the pilot symbols ~~appear in~~ to the total number of symbols in the single slot of the signal becomes a substantially optimum value in consideration of both accuracy of coherent detection by using the pilot symbols and transmission efficiency of the signal.